ABC Networking Day

Connecting Treasures

28 June 2019

ABC Networking Day 2019
KIT Royal Tropical Institute
Mauritskade 63, 1092 AD Amsterdam
Today, you have a unique opportunity to experience the diversity of research that makes up the Amsterdam Centre for Brain and Cognition (ABC)!

We will start the day with presentations from figureheads from the different ABC themes. Then, after lunch, there is time for a session with exciting flash talks. We hope this day will allow you to find ABC researchers in other fields that share your interests, in order to build bridges and share ideas (perhaps to collaboratively apply for one of those ABC grants in the future?).

We wish you a very inspiring day!

Jorien Treur
Marte Otten
Suzanne Oosterwijk
# Program

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10:10 - 10:55 Talks: ABC Themes

Theme: Perception, Attention & Consciousness

10:10 - 10:25
Umberto Olcese  
UvA FNWI  
Swammerdam Institute for Life Sciences

*Perception, Attention and Consciousness: from mice to humans ... and computers.*

In this talk I will present a selection of ongoing research activities within ABC linked to the PAC (perception, attention and consciousness) thematic profiles. I will show how this theme is tackled by ABC researchers across faculties using a variety of methods: system-level studies in mice, experiments involving human subjects and the development of computer models. I will then present the first planned activities of the PAC thematic profiles.

Theme: Translational Science

10:25 - 10:40
Anouk Schrantee  
NiN  
Spinoza Centre for Neuroimaging

*Translational research within the ABC.*

Translational science can be defined as research that attempts to translate basic scientific findings into potential treatments for disease. In a broader sense of the word, translational science can be associated with interdisciplinary research. In this presentation, I will discuss translational science within the context of ABC as it is now, as well as propose ideas for the future.
Theme: Plasticity, Memory and Language

10:40 - 10:55
Carien Lansink  FNWI  Swammerdam Institute for Life Sciences

Are visual and auditory cortex really sensory brain areas?

In this talk, I will introduce the theme Plasticity, Memory and Language and I will show ABC research lines in this theme. In the second part, I will discuss how neuronal responsivity in the visual and auditory cortex is influenced by spatial parameters. These findings challenge classical ideas on the functions of early sensory cortical areas as unimodal feature detectors.

11:15 - 12:00 Talks: ABC Themes

Theme: Decision Making, Impulse Control and Rationality

11:15 - 11:30
Ruth Van Holst  Amsterdam UMC  Amsterdam Institute for Addiction Research

When decision-making, impulse control and rationality (DIR) go awry: Addiction and compulsions.

In this talk, I will give a birds’ eye view of the work that we are doing at the department of psychiatry of the AmsterdamUMC location AMC. In our research group, we take a more clinical perspective and investigate how problems in decision-making, impulse control, and rationality play a role in psychiatric disorders. Eventually, we aim to use our scientific findings to improve therapies for addictions and compulsions.
In this talk a brief overview will be given of the type of autism studies conducted in my research group. I will present bits of brain, cognition and co-occurring conditions studies to show why an individual difference approach is needed when focusing on autism and aging.

Deep Learning as, and for, neuro-modelling.

Data is being collected in most, if not all, studies in neuroscience. Deep learning has emerged as the front-runner in analyzing data products from different modalities. I will highlight some of the successes of using deep learning in medical imaging analysis. Deep learning algorithms, although inspired by the brain, have in the most part evolved independent of neuroscientific principles. A new wave of methods though are looking again for alternatives in neuroscience. Are these algorithms feasible? Biologically plausible? We will touch upon few of these questions.
13:00 - 14:00 Flash Talks

Christin Scholz  UvA FMG  Communication Science
Neural Mechanisms of Persuasion and Behavior Change.

Irene van de Vijver  UvA FMG  Clinical psychology
Corticostriatal white-matter tracts supporting habitual behavior in the lab and in real life.

Monja Hoven  AMC  AMC Psychiatry
The role of attention and loss aversion in decision-making under risk in gambling disorder: eye-tracking study.

Joel van der Weele  UvA FEB  CREED
Anticipatory anxiety and wishful thinking.

Björn Lindström  UvA FMG  Department of Social Psychology.
Transfer of social threat learning to decision-making.

Lucas Molleman  UvA FMG  Psychology
Social learning in social networks.

Martijn Wokke  UvA FMG  Brain and cognition
Anterior Prefrontal cortex mediates implicit inferences.

Jelle Zuidema  UvA FNWI  ILLC
Deep Language Models, Interpretability & the Brain.

Padraic Monaghan  UvA FGW  English
Relations among language acquisition, processing and change.
Lynn Sörensen  UvA FMG  Psychology
Leveraging Spiking Deep Neural Networks to understand Visual Attention in Natural Scenes.

Lucia Talamini  UvA FMG  Psychology
Reading and manipulating brain activity in real-time.

Olivier de Vries  UvA FMG  Clinical Psychology
The Dynamics of Emotional Episodic Memory.

Anna Gerlicher  UvA FMG  Clinical Psychology
Dopamine-dependent prefrontal reactivations promote long-term benefit of fear extinction.

Anne Marije Kaag  AMC  Developmental psychology
Sex differences in the neuropathology of substance use disorders.